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## The Cost of Inaction: A New Model for Physical Audiovisual Media Holdings

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# Mixed Media: Working with Audio and Visual Materials—

Heather Fox, Assistant Editor, University of Louisville

Contact HeatherFox at [heather.fox@louisville.edu](mailto:heather.fox@louisville.edu) if you would like to guest author a Mixed Media column or share a good idea.

## The Cost of Inaction: A New Model for Physical Audiovisual Media Holdings

By Chris Lacinak and Bertram Lyons, AVPreserve

*Special thanks to Michael Casey of Indiana University for his many contributions to the evolving thoughts behind this work as well as some of the content of this article.*

Many organizations hold physical audiovisual legacy media as assets in their collections. The day is fast approaching when it will be impossible or financially unfeasible to reproduce the content stored on these media—most experts agree on an estimate of 10 to 15 years, or 2024 to 2029. This is a universal conundrum that poses a serious threat to the future value derived from content stored on physical audiovisual legacy media. This conundrum is not specific to academic institutions. It manifests in organizations of all types and sizes, including government institutions, corporations, nonprofits, museums, media companies, and more. If collecting organizations do not act now to digitize their audiovisual collections—to at least save the option to make appraisal decisions in the future—these assets will be lost to degradation and obsolescence.

For two years, AVPreserve ([www.avpreserve.com](http://www.avpreserve.com)) has been building and testing a tool that has been released freely to the public to show raw numbers and visualizations demonstrating the costs of inaction. COI: The Cost of Inaction Calculator ([coi.avpreserve.com](http://coi.avpreserve.com)) is an open and free tool that helps organizations analyze the implications of choosing various levels of response with regard to digitizing legacy collections of audiovisual materials. COI

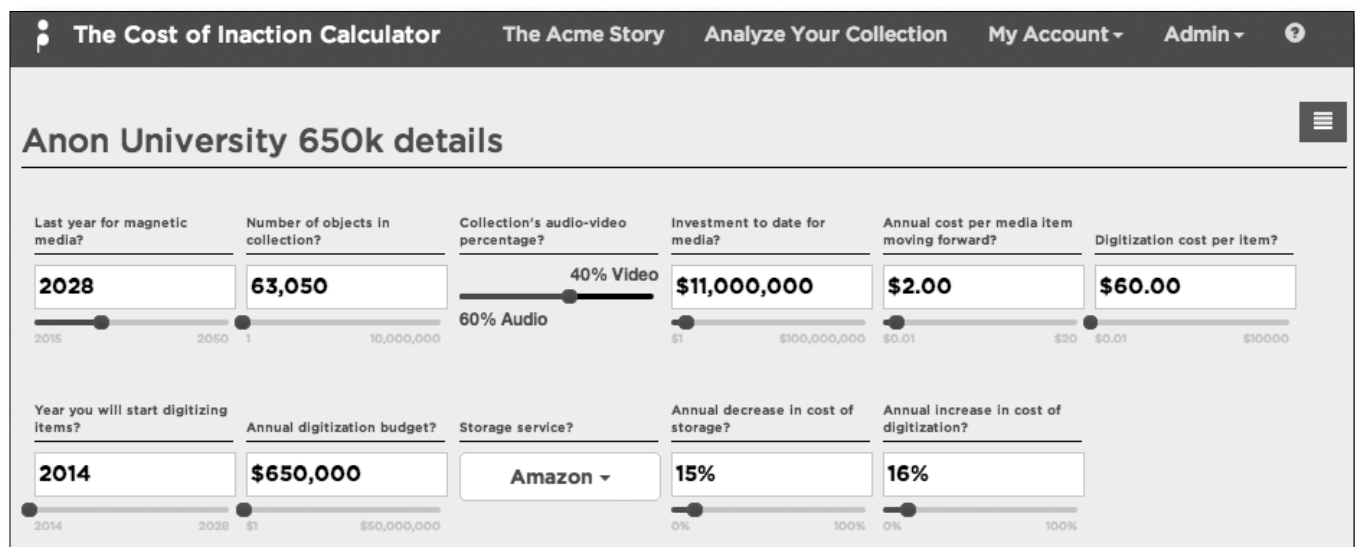
is a counterperspective to the concept of “ROI,” or return on investment, often raised with ill-effect when decision makers analyze digitization and preservation projects. COI recognizes past and present investment in collections to add a data point to ROI to help effectively articulate what may be lost in the way of access, intelligence, and finances based on various scenarios.

### The Cost of Inaction Calculator

After years of working with organizations to help make the case for digitization, it has become clear that incorporating the COI model and analyses into the decision-making process around digitization of legacy physical audiovisual media helps organizations understand the implications and make well-informed decisions. Providing objective financial metrics and quantifying the loss of media and content help make the case for taking more immediate action while also helping to avoid a paralyzing all-or-nothing mindset by enabling insights into the choices available.

To date, organizations have had no way to quantify the financial and intellectual cost of inaction to supplement traditional arguments and bridge the gaps between caretakers or archivists and executives or administrators.

Figure 1: Collection parameters for entry



The Cost of Inaction Calculator enables organizations to analyze and report on the implications of various scenarios representing different levels of action. The calculator prompts users to enter the following parameters, also shown in Figure 1:

- Last year of magnetic media
- Number of objects in collection
- Collection's audio and video percentage
- Investment to date for media
- Annual cost per media item moving forward
- Digitization cost per item
- Year digitization will start
- Annual digitization budget
- Storage service (dictates annual storage cost)
- Annual decrease in cost of storage
- Annual increase in cost of digitization

The help menu offers information on how to interpret and adjust these parameters accordingly, as well as the assumptions behind them.

Reporting is provided in two sections, both in charts as well as tabular data. The first is called the Collection

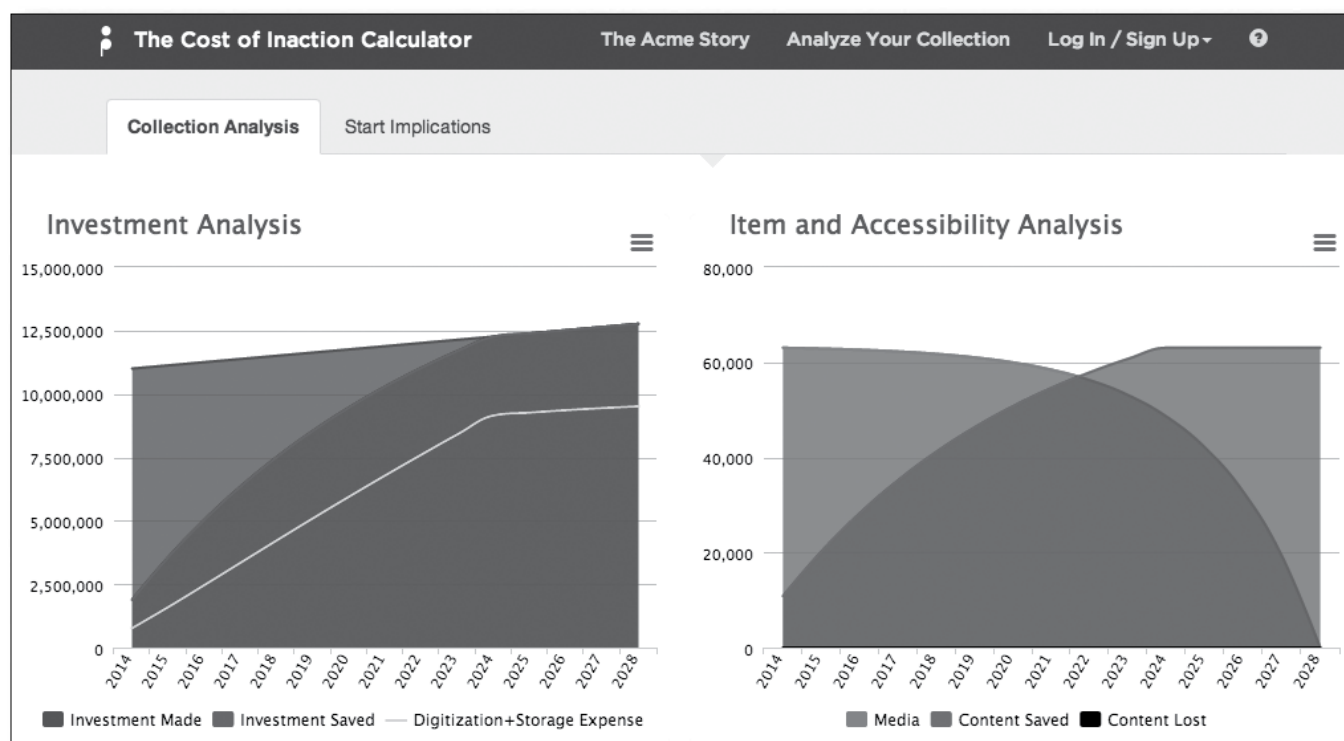
Analysis report and provides results based on the collection details entered by the user as follows:

- Year
- Media
- Content saved
- Excess items digitized
- Investment made
- Content lost
- Investment lost
- Investment saved
- Digitization expense
- Storage expense
- Digitization + storage expense
- Investment saved per \$1 of expense
- Quality of selection

The data reported show the cumulative progression of implications over time as seen in Figures 2 and 3.

*(Continued on page 21)*

**Figure 2: Collection Analysis charts**



(Continued from page 22)

**Figure 3: Collection Analysis tabular data**

The Cost of Inaction Calculator												
The Acme Story   Analyze Your Collection   Log In / Sign Up												
Export to CSV												
Year	Media	Content Saved	Excess Items Digitized	Investment Made	Content Lost	Investment Lost	Investment Saved	Digitization Expense	Storage Expense	Digitization + Storage Expense	Investment Saved per \$1 of expense	Quality of Selection
2014	63,050	10,833	10,659	\$11,000,000	0	\$9,109,966	\$1,890,034	\$650,000	\$115,811	\$765,811	\$2.47	100.00%
2015	62,876	20,172	9,089	\$11,126,100	0	\$7,566,381	\$3,559,719	\$1,300,000	\$299,112	\$1,599,112	\$2.23	99.72%
2016	62,625	28,223	7,691	\$11,252,200	0	\$6,215,329	\$5,036,871	\$1,950,000	\$517,101	\$2,467,101	\$2.04	99.33%
2017	62,265	35,164	6,424	\$11,378,300	0	\$5,032,474	\$6,345,826	\$2,600,000	\$747,957	\$3,347,957	\$1.90	98.76%
2018	61,749	41,147	5,241	\$11,504,400	0	\$3,996,532	\$7,507,868	\$3,250,000	\$977,573	\$4,227,573	\$1.78	97.94%
2019	61,007	46,305	4,093	\$11,630,500	0	\$3,088,890	\$8,541,610	\$3,900,000	\$1,197,212	\$5,097,212	\$1.68	96.76%
2020	59,942	50,751	2,917	\$11,756,600	0	\$2,293,272	\$9,463,328	\$4,550,000	\$1,401,832	\$5,951,832	\$1.59	95.07%
2021	58,412	54,584	1,636	\$11,882,700	0	\$1,595,456	\$10,287,244	\$5,200,000	\$1,588,896	\$6,788,896	\$1.52	92.64%
2022	56,215	57,889	150	\$12,008,800	0	\$983,007	\$11,025,793	\$5,850,000	\$1,757,526	\$7,607,526	\$1.45	89.16%
2023	53,061	60,738	0	\$12,134,900	0	\$445,063	\$11,689,837	\$6,500,000	\$1,907,915	\$8,407,915	\$1.39	84.16%
2024	48,531	63,050	0	\$12,261,000	0	\$0	\$12,261,000	\$7,112,071	\$2,040,613	\$9,152,684	\$1.34	76.97%
2025	42,025	63,050	0	\$12,387,100	0	\$0	\$12,387,100	\$7,112,071	\$2,153,405	\$9,265,476	\$1.34	66.65%
2026	32,682	63,050	0	\$12,513,200	0	\$0	\$12,513,200	\$7,112,071	\$2,249,279	\$9,361,350	\$1.34	51.84%
2027	19,266	63,050	0	\$12,639,300	0	\$0	\$12,639,300	\$7,112,071	\$2,330,772	\$9,442,843	\$1.34	30.56%
2028	0	63,050	0	\$12,765,400	0	\$0	\$12,765,400	\$7,112,071	\$2,400,041	\$9,512,112	\$1.34	0.00%

The second section is called the Start Implications report, and it answers four primary questions:

If I start digitizing in year x, how much will I need to spend per year to digitize all items that have not been permanently lost already?

If I start digitizing in year x, how much more money will I spend than if I start digitizing in year y?

If I start digitizing in year x, how much more investment will I lose than if I start digitizing in year y?

If I start digitizing in year x, how many more items will I lose than if I start digitizing in year y?

This report provides results based on a subset of the pertinent collection details provided by the user as follows:

- Year digitization started
- Annual digitization budget required
- Total spent by 2028
- Investment lost
- Spent + lost by 2028
- Spent + lost difference
- Content lost
- % more spent + lost
- % more content lost

Figures 4 and 5 demonstrate the Start Implications reporting.

The COI Calculator allows saving of multiple scenarios to perform comparative analysis and to come to a better understanding of the implications of different decisions. It also allows exporting the charts and tabular data as well as sharing links to scenarios. For instance, to view and explore the Anon University scenarios, see the following links:

100% scenario: [coi.avpreserve.com/viewcollection/MTMzM0Y1MzQwMzk0](http://coi.avpreserve.com/viewcollection/MTMzM0Y1MzQwMzk0)

50% scenario: [coi.avpreserve.com/viewcollection/MTMxM0Y1MzQwMzk0](http://coi.avpreserve.com/viewcollection/MTMxM0Y1MzQwMzk0)

25% scenario: [coi.avpreserve.com/viewcollection/MTMyM0Y1MzQwMzk0](http://coi.avpreserve.com/viewcollection/MTMyM0Y1MzQwMzk0)

\$650k scenario: [coi.avpreserve.com/viewcollection/MTMwM0Y1MzQwMzk0](http://coi.avpreserve.com/viewcollection/MTMwM0Y1MzQwMzk0)

## Conclusion

The Cost of Inaction has been a missing link in the discussion and analysis surrounding the funding of audiovisual digitization and preservation efforts. Recognizing and articulating this concept help bridge a gap between caretakers and administrators and offer an effective financial metric that is a meaningful addition to historic arguments based on cultural and intellectual significance. Adding

this data point—COI—to ROI provides a 360-degree perspective, looking both at past investment and the return on savings of that investment with future expense, while recognizing that the window of possible return is limited based on the obsolescence and degradation of audiovisual media. There is a cost of inaction, and every

organization should come to understand that cost in the formation of a digitization and preservation strategy to help it make well-informed decisions. Use the Cost of Inaction Calculator to help identify what the implications are for your organization at [coi.avpreserve.com](http://coi.avpreserve.com).

Figure 4: Start Implications charts

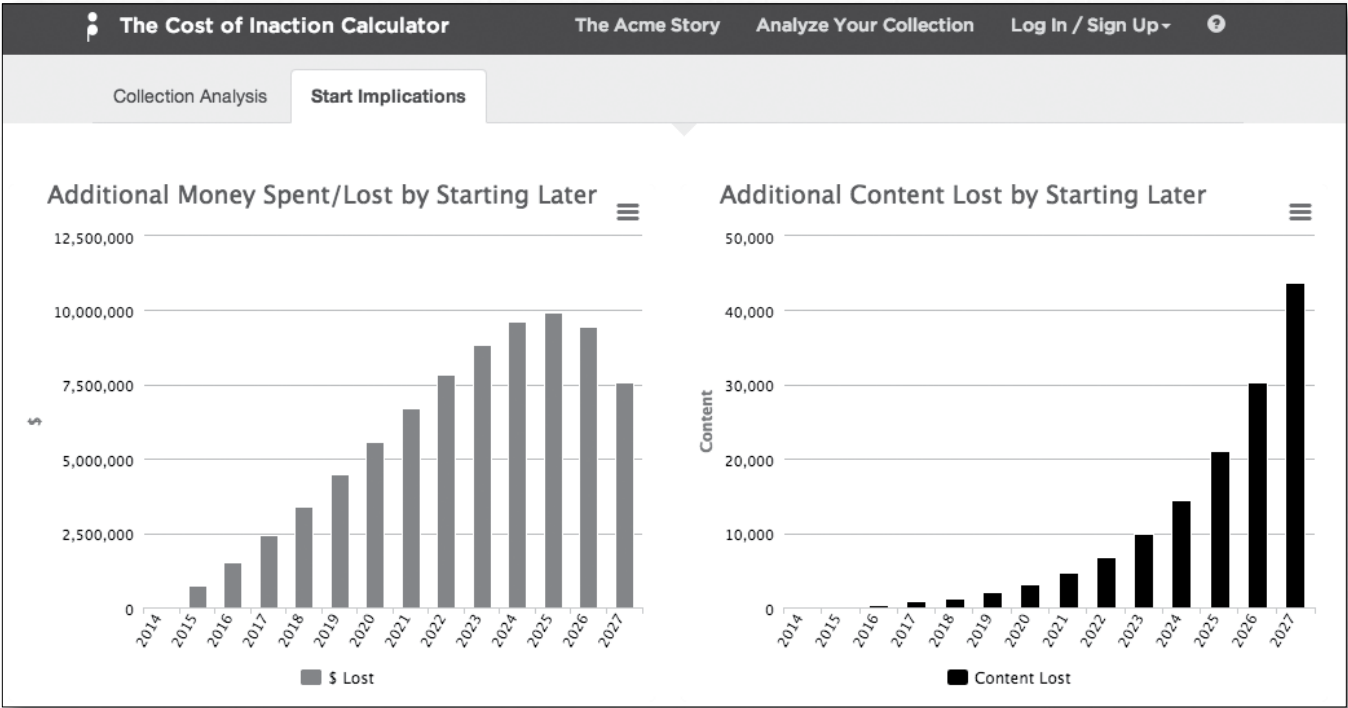


Figure 5: Start Implications tabular data

The Cost of Inaction Calculator									
The Acme Story   Analyze Your Collection   Log In / Sign Up									
Collection Analysis   Start Implications									
Year Digitization Started	Annual Digitization Budget Required	Storage Cost by 2028	Total Spent by 2028	Investment Lost by 2028	Spent + Lost by 2028	Spent + Lost Difference	Content Lost	% More Spent + Lost	% More Content Lost
2014	\$596,469	\$911,347	\$9,261,913	\$0	\$9,261,913	\$0	0	0.00%	0.00%
2015	\$706,159	\$765,323	\$9,945,390	\$35,314	\$9,980,704	\$718,791	174	7.76%	0.28%
2016	\$838,680	\$640,622	\$10,704,782	\$86,026	\$10,790,808	\$1,528,895	425	16.51%	0.67%
2017	\$999,685	\$533,980	\$11,530,515	\$158,852	\$11,689,367	\$2,427,454	785	26.21%	1.25%
2018	\$1,196,512	\$442,614	\$12,407,734	\$263,433	\$12,671,167	\$3,409,254	1,301	36.81%	2.06%
2019	\$1,438,760	\$364,153	\$13,312,993	\$413,617	\$13,726,610	\$4,464,697	2,043	48.20%	3.24%
2020	\$1,739,092	\$296,582	\$14,209,318	\$629,288	\$14,838,606	\$5,576,693	3,108	60.21%	4.93%
2021	\$2,114,342	\$238,195	\$15,038,589	\$939,002	\$15,977,591	\$6,715,678	4,638	72.51%	7.36%
2022	\$2,587,058	\$187,560	\$15,709,908	\$1,383,768	\$17,093,676	\$7,831,763	6,835	84.56%	10.84%
2023	\$3,187,652	\$143,504	\$16,081,764	\$2,022,473	\$18,104,237	\$8,842,324	9,989	95.47%	15.84%
2024	\$3,957,421	\$105,104	\$15,934,788	\$2,939,685	\$18,874,473	\$9,612,560	14,519	103.79%	23.03%
2025	\$4,952,782	\$71,703	\$14,930,049	\$4,256,846	\$19,186,895	\$9,924,982	21,025	107.16%	33.35%
2026	\$6,251,239	\$42,951	\$12,545,429	\$6,148,356	\$18,693,785	\$9,431,872	30,368	101.84%	48.16%
2027	\$7,959,818	\$18,874	\$7,978,692	\$8,864,657	\$16,843,349	\$7,581,436	43,784	81.86%	69.44%